CDC HIV/AIDS Facts:

Revised 2005 HIV/AIDS Surveillance Report

June 2007

BACKGROUND

In November 2006, the Centers for Disease Control and Prevention (CDC) released the 2005 HIV/AIDS Surveillance Report, Vol.17. This report includes data on cases of HIV infection and AIDS diagnosed through December 2005 and reported to CDC through June 2006. While reviewing the 2001-2005 data in preparation for the upcoming 2006 HIV/AIDS surveillance analysis, CDC's statistical team identified an error in the analysis of estimated AIDS cases. The error affects only estimated AIDS cases. Data on reported HIV and AIDS cases (i.e., the raw data reported to CDC by state health departments) were unaffected.

As with most surveillance systems, AIDS cases are subject to delays in reporting. While most (80%) AIDS cases are reported within one year of diagnosis, delays in reporting for the remaining 20% of cases may be as long as several years. Each year, CDC applies statistical weights to the reported AIDS data to account for these delays and analyze trends in recent years.

A manual error in the computer code used to adjust for such delays resulted in the application of incorrect statistical weights. This resulted in overestimates of the number of AIDS cases for the period 2001 to 2005. The overestimation applied primarily to 2005 data.

The error does not affect funding for major AIDS assistance and treatment programs administered by the Health Resources and Services Administration (HRSA) or the Department of Housing and Urban Development (HUD), which rely on reported (not estimated) cases for allocation of resources. These programs include the Ryan White HIV/AIDS Treatment Modernization Act and the Housing Opportunities for Persons with AIDS (HOPWA) Program.

REVISED ESTIMATES

The magnitude of the error is relatively small. For the 2001-2005 time period overall, the estimate of AIDS cases has been revised downward from 206,360 to 202,235, a difference of 2 percent. For 2005 alone, estimated AIDS cases have been revised from 45,669 to 41,897, a difference of 8 percent. Because some AIDS cases are diagnosed concurrently with HIV infection, there are also small corrections to the estimates of HIV/AIDS cases. For the overall time period, estimated HIV/AIDS cases have been revised downward from 186,449 to 185,634 (0.4%); for 2005, the correction was from 38,133 to 37,367 (2%). The corrections did not result in any changes to the percentage breakdowns of estimated AIDS cases or HIV/AIDS cases by race/ethnicity or by risk category.

While the overall number of AIDS cases in 2005 has been revised downward, the corrected number





of pediatric AIDS cases (<13 years) is higher than in the original report. The total difference in estimated pediatric AIDS cases for 2005 is 10 (58 versus 68). This is because the statistical error in the procedure that assigns weights for reporting delays resulted in a small portion of cases (including pediatric cases) being underweighted and the remainder of the cases (mostly non-pediatric) being over-weighted.

NEXT STEPS

In addition to correcting the error and issuing revised estimates, CDC has completed a review of procedures for initial coding and validity checks in the estimation procedures. With assistance from the National Center for Health Statistics, we have implemented necessary steps to ensure that procedures are sound and to avoid any such errors in the future.

UPDATED PUBLICATIONS AND MATERIALS

CDC has published a revised 2005 HIV/AIDS Surveillance Report, which reflects corrections to the cover, Tables 1-6 and 8-12, Maps 1 and 2. Figure 1, and the commentary pages of the original November 2006 version of the report. CDC has also updated all CDC materials in the public domain that used the 2005 estimates, such as fact sheets, topic pages and slide sets. Other CDC documents requiring revision, such as MMWR articles and previously submitted conference abstracts, are currently being updated. In addition, CDC has provided updated data to the Kaiser Family Foundation so that it can update its widely used state health facts Web site (www. statehealthfacts.org), which is based in part on CDC's HIV/AIDS surveillance report.

The revised 2005 HIV/AIDS Surveillance Report (Vol. 17, Revised) and other updated materials can be found at http://www.cdc.gov/hiv/datarevision. htm

LOCAL OR STATE SPECIFIC ANALYSIS

Surveillance programs should check and correct any locally generated reports or epidemiologic profiles that referenced estimated U.S. or state-specific data presented in the *2005 HIV/AIDS Surveillance Report* or data from the Kaiser Family Foundation state health facts Web site (referenced above).